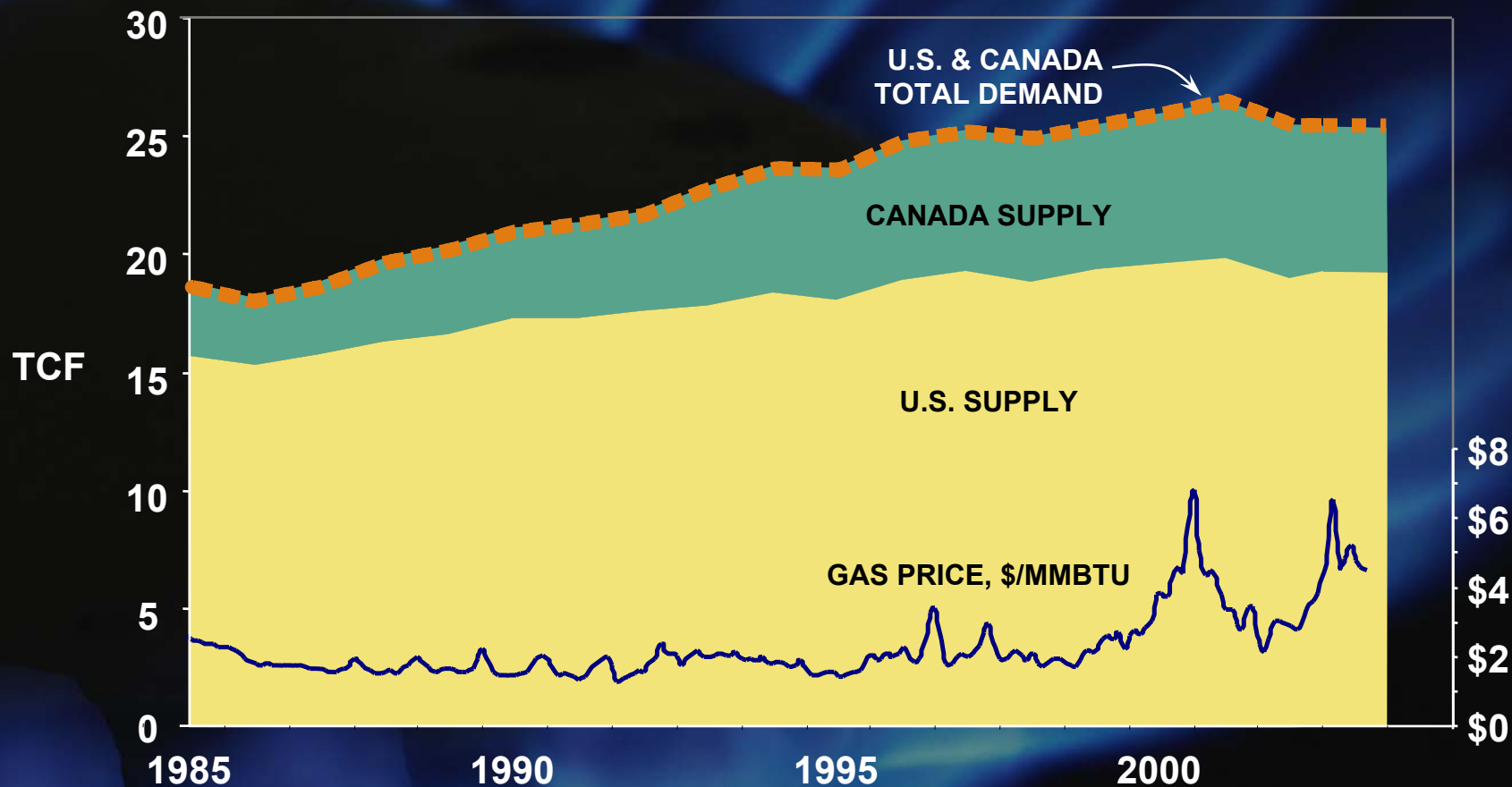


Demand Response

**Les Deman, Chair
Economics/Demographics Working Group
NPC Natural Gas Study**

NPC

Higher Prices Reflect a Fundamental Shift in Supply & Demand



Findings on Natural Gas Demand

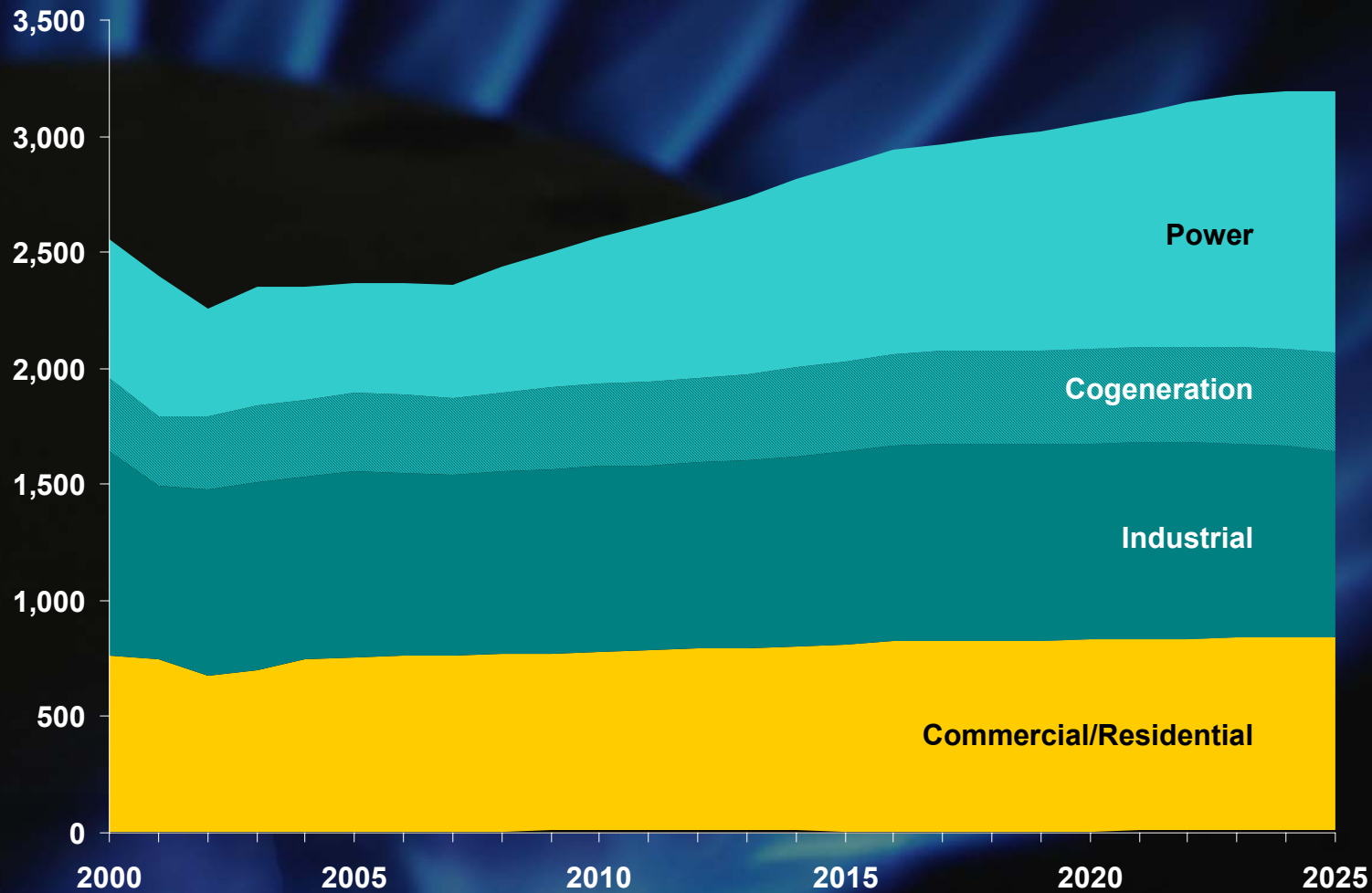
Greater energy efficiency and conservation are vital near-term and long-term mechanisms for moderating price levels and reducing volatility

Power generators and industrial consumers are more dependent on gas-fired equipment and less able to respond to higher gas prices by utilizing alternate sources of energy

Gas consumption will grow, but such growth will be moderated as the most price-sensitive industries become less competitive, causing some industries and associated jobs to relocate outside North America

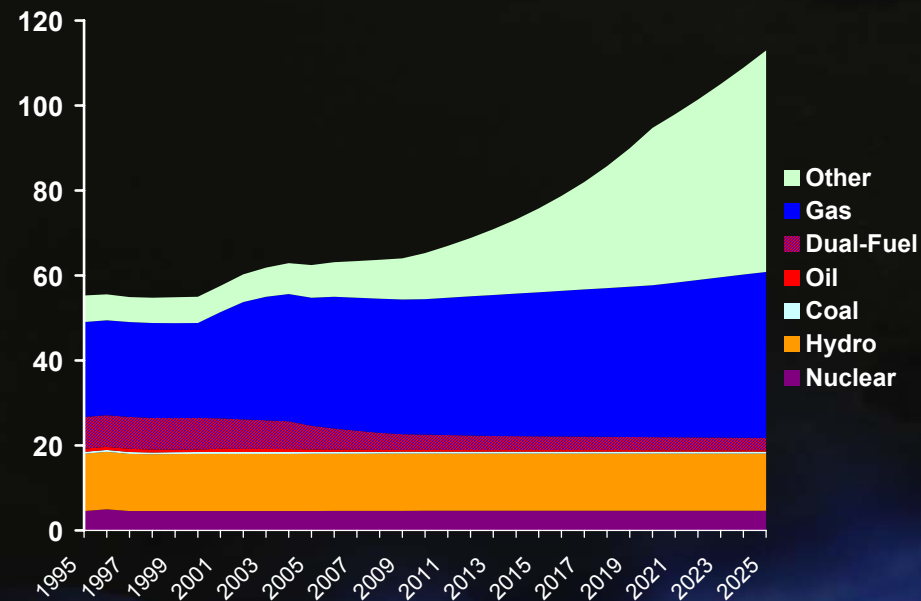
California Demand Projection

(Reactive Path, BCF)

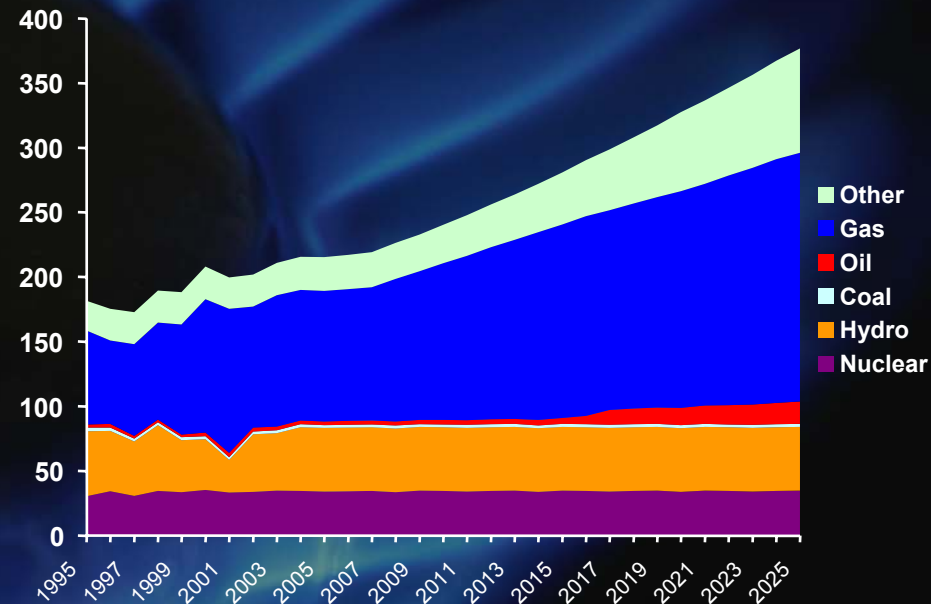


Natural Gas is the Most Significant Fuel for California Power Generation

Capacity, GW

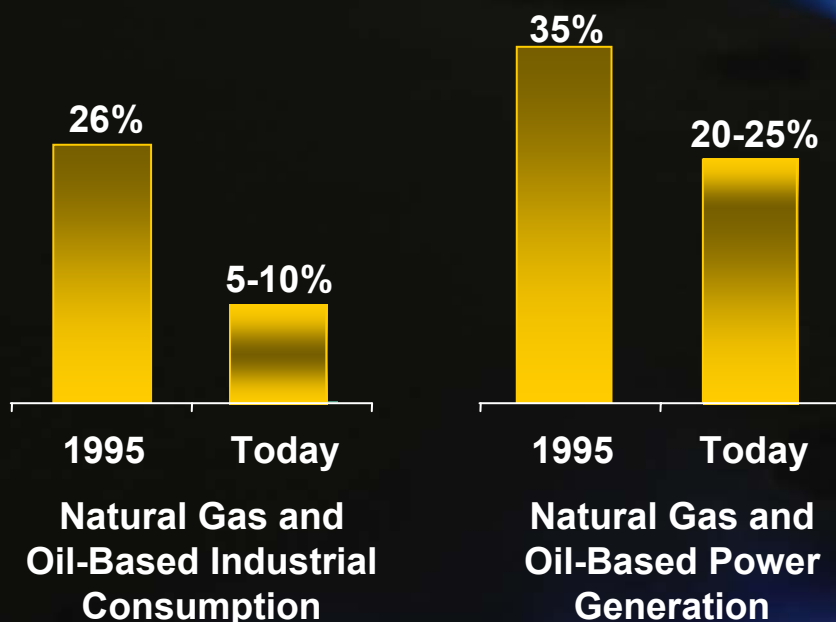


Generation, TWH

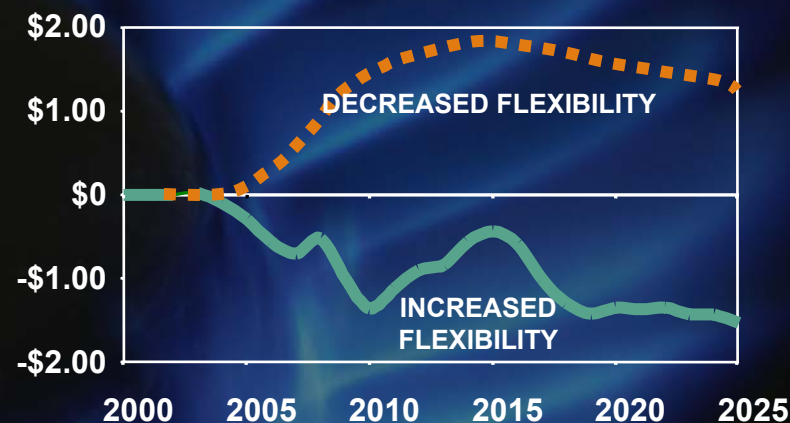


As Demand Has Grown, Flexibility Has Eroded

Fuel Substitution Capability

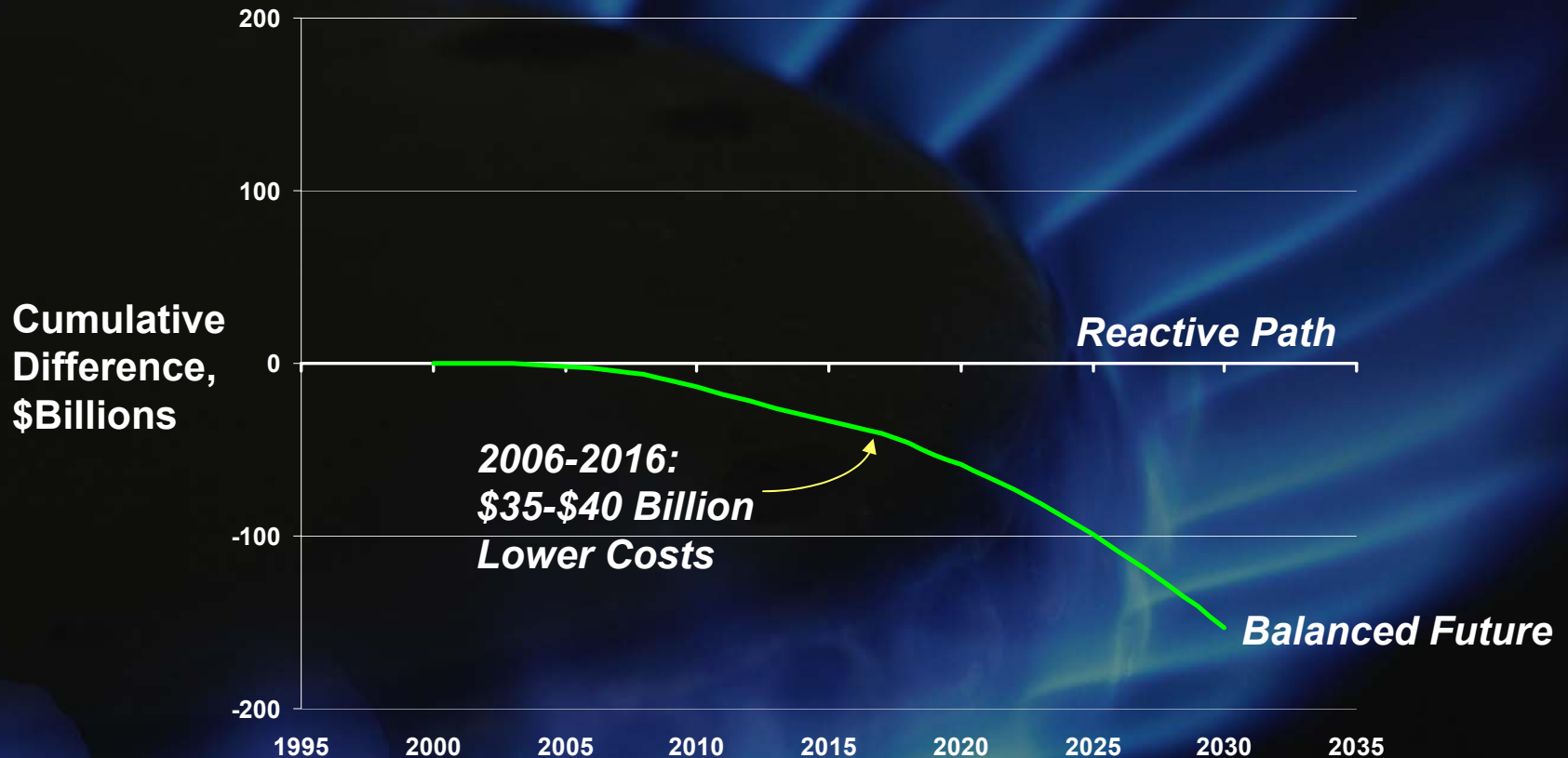


Future Impact of Flexibility



Pricing Impact vs.
Reactive Path, \$/MMBtu
(\$2002)

California Cost Impacts: Reactive Path vs Balanced Future



Efficiency and Conservation

Recommendation: Encourage Increased Efficiency and Conservation through Market-Oriented Initiatives and Consumer Education

- Educate consumers
- Improve conservation programs
- Review & upgrade efficiency standards
- Provide market signals to consumers to facilitate efficient gas use
- Improve efficiency of gas consumption by resolving the North American wholesale power market structure
- Remove regulatory and rate-structure incentives to inefficient fuel use
- Provide industrial cogeneration facilities with access to markets
- Remove barriers to energy efficiency from New Source Review

Alternate Fuel Capability

Recommendation: Increase Industrial and Power Generation Capability to Utilize Alternate Fuels

- Provide certainty of air regulations to create a clear investment setting for industrial consumers & power generators, while maintaining our commitment to improvements in air quality
 - Provide certainty of Clean Air Act provisions
 - Propose reasonable, flexible mercury regulations
 - Reduce barriers to alternate fuels by NSR processes
- Expedite hydroelectric and nuclear power plant relicensing
- Take action at the state level to allow fuel flexibility
- Incorporate fuel-switching considerations in power market structures

State-Level Action is a Key to Fuel Flexibility

- Market signals to consumers
- Efficiency standards
- Power market structure
- Environmental stewardship and enforcement
- Alternate fuel considerations in Integrated Resource Planning
- Regulatory rate recovery of switching costs
- Fuel backup
- Role of local siting boards/officials